

10007457-1

AMENDMENTS TO THE CLAIMS

In accordance with the PTO's revised amendment format, a detailed listing of all claims has been provided. A status identifier is provided for each claim in a parenthetical expression following each claim number. Changes to the claims are shown by strikethrough (for deleted matter) or underlining (for added matter).

10 1. (Currently Amended) A method of manufacturing a slotted substrate comprising:

forming a masking layer over a front side of a substrate;

patterning and etching the masking layer to form a hole therethrough, wherein the hole exposes the substrate;

15 depositing a first layer over the masking layer and in the hole on the exposed substrate;

patterning and etching the first layer to form a plug in the hole; ~~and~~

etching a back side of the substrate until a bottom surface of the plug is substantially exposed and a slot in the substrate is substantially formed, wherein 20 the plug substantially plugs up the slot, and wherein the plug substantially defines a fluid-feed passageway extending between the slot and a firing chamber; and,

subsequently removing the plug and thereby at least partially defining the fluid-feed passageway.

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2. (Currently Amended) The method of claim 1, wherein said removing ~~comprising~~ comprises etching to remove the plug after etching the back side of the substrate to form the slot.

10007457-1

3. (Original) The method of claim 1 further comprising forming another masking layer over the back side of the substrate, and patterning and etching the other masking layer before etching the substrate.
- 5 4. (Original) The method of claim 1 wherein the substrate is etched with at least one of TMAH, KOH, and other alkaline etchants.
- 10 5. (Original) The method of claim 1 further comprising forming a recess in the substrate corresponding with the hole in the masking layer, wherein the plug extends into the recess.
- 15 6. (Original) The method of claim 1 wherein the first layer is at least one of silicon dioxide, silane-based silicon dioxide, silicon nitride, field oxide, silicon carbide, silicon oxynitride and TEOS.
- 20 7. (Original) The method of claim 1 further comprising etching an interface of the substrate and the first layer along the bottom surface of the plug at a first rate; and etching an interface of the substrate and the masking layer at a second rate that is slower than the first rate.
- 25 8. (Original) The method of claim 1 further comprising substantially etching an interface of the substrate and the first layer along the bottom surface of the plug in the etching of the substrate slot.
9. (Original) The method of claim 1 further comprising defining dimensions of an opening in the front side of the substrate by utilizing the plug, wherein dimensions of the plug substantially correspond to the dimensions of the opening.

10007457-1

10. (Original) The method of claim 1 further comprising utilizing the plug to align the trench to the hole etched into the masking layer on the front side of the substrate.

5 11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

10 14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

20 19. (Cancelled)

20. (Cancelled)

25 21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

10007457-1

24. (Cancelled)

25. (Cancelled)

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26. (Cancelled)

27. (Cancelled)

10 28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

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31. (Previously Presented) A method of manufacturing a fluid ejection device comprising:

forming a masking layer over a front side of a substrate;

patterning and etching the masking layer to form a hole therethrough;

20 depositing a first layer over the masking layer and in the hole and physically contacting the substrate below the hole to create an interface between the substrate and the first layer;

patterning and etching the first layer to form a plug in the hole; and

etching from a back side of the substrate to the interface of the substrate

25 and the first layer at the plug, thereby substantially forming a fluid slot in the substrate with the plug substantially plugging up the slot.

32. (Currently Amended) A substrate slotting method comprising:

forming a masking layer over a front surface of a substrate;

10007457-1

patterning and etching the masking layer to form a hole therethrough;  
depositing a first layer over the masking layer and in the hole;  
patterning and etching the first layer to form a plug in the hole; and,  
etching a back side of the substrate to remove substrate material until a  
5 bottom surface of the plug is substantially exposed and a slot in the substrate is  
substantially formed wherein the plug at least partially defines the relative  
position of the slot at the front surface.

33. (Previously Presented) The method of claim 32, wherein said act of  
10 patterning and etching the first layer to form a plug comprises patterning and  
etching the first layer to form a plug that substantially defines a fluid-feed  
passageway configured to fluidly couple the slot and a firing chamber.

34. (Previously Presented) The method of claim 32, wherein said act of  
15 etching forms the slot having dimensions at the first surface that substantially  
match the first area.

35. (Previously Presented) The method of claim 32, wherein said act of  
patterning and etching the masking layer exposes portions of the first surface of  
20 the substrate and wherein said depositing comprises depositing the first layer, at  
least a portion of which, directly contacts the first surface of the substrate and  
wherein substrate material defining the first surface and contacting the first layer  
etches faster than other portions of the substrate material defining the first  
surface but not contacting the first layer.

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36. (Previously Presented) The method of claim 32, wherein said act of  
etching a back side of the substrate comprises etching the back side of the  
substrate and removing substrate material sequentially in a direction extending  
generally toward the first surface until a bottom surface of the plug is exposed

10007457-1

and then etching generally laterally to form the slot respectively aligned at the first surface with the plug

37. (Cancelled)

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38. (Cancelled)

39. (Cancelled)

10 40. (Cancelled)

41. (Cancelled)

10007457-1

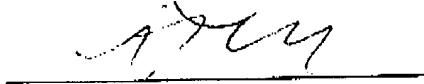
CONCLUSION

Applicant believes the above Amendments to Claims 1, 2 and 32 to be  
5 consistent with the intent of the agreement reached between the Applicant and  
the Examiner during the 11/26/03 telephone interview. Applicant further  
believes that these amendments do not affect the scope of claims 1, 2 and 32.

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8 of 8